

ABSTRACT

An apparatus is disclosed incorporating a plurality of light sources, such as a plurality of lighting emitting diodes, and a beam altering mechanism for altering the light projected by the plurality of light sources. Several mechanisms for altering the beam produced by the plurality of light emitting diodes are disclosed. The present invention can be used in for example hand held flashlights and theatrical lighting. The present invention in one embodiment discloses a hand held flashlight incorporating a plurality of light sources and a beam altering mechanism capable of changing the color of the emitted light beam produced by the flashlight. The beam altering mechanism may be comprised of an aperture device, which may be an aperture plate, provided with a plurality of apertures that are strategically aligned with the individual light beams emitted from each of the plurality of light sources. In one embodiment additional apertures containing color modifying filters may also be strategically placed in the aperture device and these modifying filters can be aligned over each of the light sources by rotation of the aperture device. The aperture device may be round and may be mounted centrally to a substrate on which the plurality of light sources are mounted. The plurality of light sources can be arranged symmetrically to provide uniform illumination. The aperture device can be arranged with a plurality of apertures that contain light refractive optics that are strategically placed in the aperture device and provide a means for changing the focus of the overall beam produced by for example a flashlight. The plurality of light sources and the aperture device may be incorporated into a remote controlled lighting device .